



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/815,216

03/31/2004

Leon Edward Gregg

ROC920040029US1

7113

30206

7590

06/07/2007

IBM CORPORATION

ROCHESTER IP LAW DEPT. 917

3605 HIGHWAY 52 NORTH

ROCHESTER, MN 55901-7829

EXAMINER

HORVATH JR, THOMAS A

ART UNIT

PAPER NUMBER

2188

MAIL DATE

DELIVERY MODE

06/07/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/815,216	Applicant(s) GREGG ET AL.	
	Examiner Thomas A. Horvath, Jr.	Art Unit 2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 is directed to an apparatus comprising stored media information, an indicator, and a device selection control program. These features are essentially software *per se* and are not directed to a physical apparatus. By definition an apparatus is a product requiring some physical structure. As claim 19 and dependent claims 20-22 do not recite any physical structure of the apparatus claimed, the applicant has failed to particularly point out and distinctly claim the subject matter which applicant regards as the invention in these claims.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Specifically claims 13-18 are directed to a computer program product. A computer program is considered software *per se* and thus non-statutory subject matter unless embodied on a physical computer readable medium. Claims 19-22 are directed toward an apparatus, however the features disclosed are directed to software *per se* and are also considered non-statutory.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 11-15, 17, 19, 21, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Leonhardt et al. (US 5164909).

As for claim 1, Leonhardt discloses a method for implementing device selection in a robotic media library with multiple media types and multiple device types (**Col. 1 Lines 40-52**) comprising the steps of:

storing a first indicator with predefined media information to identify a required technology for each media (**Fig. 14 Volume Attributes 1401; data storage image includes definition of the type of media Col. 13 Lines 13-15**);

identifying an operation request to the robotic media library (**Fig. 11 user requests access 1101**);

responsive to said operation request, checking for multiple device types in the robotic media library (**Fig. 11 generate prioritized list of available media drives 1107**);

responsive to identifying the multiple device types in the robotic media library and a default value for said first indicator, selecting a first device type (**Fig. 11 select media type 1106**); and

selecting a device of said selected first device type (**Fig. 11 select specific media drive 1110**).

Art Unit: 2188

As for claim 2, Leonhardt discloses the steps responsive to said operation request, of setting a device type from said predefined media information (**Fig. 11 review data file for attributes and constraints 1104 results in select media type 1106**).

As for claim 3, Leonhardt discloses the step, of selecting said first device type includes the steps of storing a value representing said first device type for said first indicator (**Fig 14 Drive Attributes 1402; data storage image includes definition of the type of media Col. 12 Lines 65-68**).

As for claim 5, Leonhardt discloses the steps responsive to selecting said device of said selected first device type, placing media in said selected device (**Fig. 11 mount media element on selected drive 1111**).

As for claim 11, Leonhardt discloses the steps of storing a second indicator to describe each said device in said robotic media library (**Fig 14 Drive Attributes 1402; data storage image includes definition of the type of media Col. 12 Lines 65-68**).

As for claim 12, Leonhardt discloses the steps of storing said second indicator with predefined information for each said device in said robotic media library (**Fig 14 Drive Attributes 1402; data storage image includes definition of the type of media Col. 12 Lines 65-68**).

As for claims 13-15 and 17, Leonhardt discloses a computer program product (**automated cartridge library software Fig. 1 Item 110, Col. 3 Line 30**) for implementing device selection in a robotic media library in a computer system, said computer program product including instructions executed by the computer system to cause the computer system to perform the steps recited in claims 1-3 and 5.

Art Unit: 2188

As for claim 19, Leonhardt discloses an apparatus for implementing device selection in a robotic media library comprising:

a stored media information (**Fig. 14 Volume Attributes 1401**);

a first indicator stored with predefined media information to identify a required technology for each media (**Fig. 14 Volume Attributes 1401; data storage image includes definition of the type of media Col. 13 Lines 13-15**);

a device selection control program (**automated cartridge library software Fig. 1 Item 110, Col. 3 Line 30**) for identifying an operation request to the robotic media library; responsive to said operation request, for checking for multiple device types in the robotic media library (**Fig. 11 generate prioritized list of available media drives 1107**); responsive to identifying the multiple device types in the robotic media library and a default value for said first indicator, for selecting a first device type (**Fig. 11 select media type 1106**); and for selecting a device of said selected first device type (**Fig. 11 select specific media drive 1110**).

As for claim 21, Leonhardt discloses wherein said device selection control program responsive to media being placed in said selected device, performs checking for successful operation, and responsive to said successful operation, continues with a requested operation (**the retrieved media is loaded onto the drive element where it is read in the usual fashion Col. 4 Lines 54-56 a drive inherently checks for successful operation and concluding the requested operation is a natural result**).

As for claim 22, Leonhardt discloses wherein said device selection control program stores a second indicator to describe each said device in said robotic media library (**Fig 14 Drive Attributes 1402; data storage image includes definition of the type of media Col. 12 Lines 65-68**).

Art Unit: 2188

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 6, 8-10, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leonhardt in view of Hwang (US 6058082).

As for claim 6, Leonhardt discloses the steps of checking for successful operation, and responsive to an unsuccessful operation **(the retrieved media is loaded onto the drive element where it is read in the usual fashion Col. 4 Lines 54-56 a drive inherently checks for successful operation)**.

Leonhardt does not expressly disclose responsive to an unsuccessful operation, selecting a next device type.

Hwang teaches detecting an error and determining the type of media based on comparison **(Col. 1 Lines 49-62; specifically responsive to detecting an error begins trying the next type of media as in Fig. 5 i.e. item 501 is test that results in determining either no disc as in 502 or try next media as in item 503 which is a test for determining if media is a multi-layered DVD as in item 304)**.

Art Unit: 2188

Leonhardt and Hwang are from the same field of endeavor, that is the art of handling multimedia devices.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include a method of discriminating media as in Hwang in the system of Leonhardt in order to quickly discriminate the type of storage being used **(Hwang Col. 1 Lines 32-39)**

As for claim 8, Leonhardt discloses the steps of selecting a second device of said selected next device type, placing media in said selected second device **(Leonhardt Fig. 11 mount media element on selected drive 1111 will still naturally result in the event a second drive is chosen).**

As for claim 9, Leonhardt discloses the steps of checking for successful operation, and responsive to an unsuccessful operation **(the retrieved media is loaded onto the drive element where it is read in the usual fashion Col. 4 Lines 54-56 a drive inherently checks for successful operation).**

Leonhardt does not expressly disclose responsive to an unsuccessful operation, selecting a next device type.

Hwang teaches detecting an error and determining the type of media based on comparison **(Col. 1 Lines 49-62; specifically responsive to detecting an error begins trying the next type of media as in Fig. 5 i.e. item 501 is test that results in determining either no disc as in 502 or try next media as in item 503 which is a test for determining if media is a multi-layered DVD as in item 304).**

Leonhardt and Hwang are from the same field of endeavor, that is the art of handling multimedia devices.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include a method of discriminating media as in Hwang in the system of Leonhardt in order to quickly discriminate the type of storage being used (**Hwang Col. 1 Lines 32-39**)

As for claim 10, Leonhardt discloses the steps of checking for successful operation, and responsive to said successful operation, continuing with a requested operation (**the retrieved media is loaded onto the drive element where it is read in the usual fashion Col. 4 Lines 54-56 a drive inherently checks for successful operation and concluding the requested operation is a natural result**).

As for claim 18, Leonhardt discloses the steps of checking for successful operation, and responsive to an unsuccessful operation (**the retrieved media is loaded onto the drive element where it is read in the usual fashion Col. 4 Lines 54-56 a drive inherently checks for successful operation**).

Leonhardt does not expressly disclose responsive to an unsuccessful operation, selecting a next device type.

Hwang teaches detecting an error and determining the type of media based on comparison (**Col. 1 Lines 49-62; specifically responsive to detecting an error begins trying the next type of media as in Fig. 5 i.e. item 501 is test that results in determining either no disc as in 502 or try next media as in item 503 which is a test for determining if media is a multi-layered DVD as in item 304**).

Leonhardt and Hwang are from the same field of endeavor, that is the art of handling multimedia devices.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include a method of discriminating media as in Hwang in the system of Leonhardt in order to quickly discriminate the type of storage being used (**Hwang Col. 1 Lines 32-39**)

As for claim 20, Leonhardt discloses the steps of checking for successful operation, and responsive to an unsuccessful operation (**the retrieved media is loaded onto the drive element where it is read in the usual fashion Col. 4 Lines 54-56 a drive inherently checks for successful operation**).

Leonhardt does not expressly disclose responsive to an unsuccessful operation, selecting a next device type.

Hwang teaches detecting an error and determining the type of media based on comparison (**Col. 1 Lines 49-62; specifically responsive to detecting an error begins trying the next type of media as in Fig. 5 i.e. item 501 is test that results in determining either no disc as in 502 or try next media as in item 503 which is a test for determining if media is a multi-layered DVD as in item 304**).

Leonhardt and Hwang are from the same field of endeavor, that is the art of handling multimedia devices.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to include a method of discriminating media as in Hwang in the system of Leonhardt in order to quickly discriminate the type of storage being used (**Hwang Col. 1 Lines 32-39**)

Art Unit: 2188

Claims 4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leonhardt in view of examiner's official notice.

As for claims 4 and 16, Leonhardt discloses the elements of claims 1 and 13 as applied to claims 4 and 16, respectively.

Leonhardt does not disclose wherein the step of selecting said first device type includes the steps of selecting a newest device type in the robotic media library for said first device type. The examiner takes official notice that selecting the newest type of media as the first type is an obvious design choice in view of the need to write data on newly implemented media in order to phase out older media.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leonhardt and Hwang as applied to claim 6 above, and further in view of examiner's official notice.

Leonhardt in view of Hwang discloses the features of claim 6 applied to claim 7.

Neither Leonhardt nor Hwang discloses selecting said next device type includes the steps of selecting a next oldest device type in the robotic media library for said next device type. The examiner takes official notice that selecting the oldest type of media as the next type is an obvious design choice in view of the likelihood that data is written on older media if not present in newer media.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kulakowski et al. (US 530214) discloses a multi-media type library.

Rockwell et al. (US 6138909) discloses a standard media handling system.

Art Unit: 2188


Voorhees et al. (US 2004/0221101) discloses another method of managing multi-media.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Horvath, Jr. whose telephone number is (571)-270-1387. The examiner can normally be reached on Monday-Friday, 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571)-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TH


HYUNG SOUGH
SUPERVISOR
6-04-07